



UNITED STATES DEPARTMENT OF COMMERCE **Patent and Trademark Office**

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ATTORNEY DOCKET NO. FIRST NAMED INVENTOR APPLICATION NO. **FILING DATE** UB/983,605 HM32/0924 **EXAMINER** LONDA AND TRAUB PAPER NUMBER

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09/24/99

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 08/983,605

Applicant(s)

Roder et al.

Examiner

Phuong Bui

Group Art Unit 1648



X Responsive to communication(s) filed on 5/1/98, 2/17/99 and 7/1	9/99
☐ This action is FINAL .	
☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.	
A shortened statutory period for response to this action is set to expi is longer, from the mailing date of this communication. Failure to res application to become abandoned. (35 U.S.C. § 133). Extensions of 37 CFR 1.136(a).	pond within the period for response will cause the
Disposition of Claims	
X Claim(s) 1-8	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s)	is/are allowed.
	is/are rejected.
Claim(s)	
☐ Claims	
Application Papers See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The drawing(s) filed on is/are objected to by the Examiner. The proposed drawing correction, filed on is approved disapproved. The specification is objected to by the Examiner. The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). All Some* None of the CERTIFIED copies of the priority documents have been received. The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). All Some* None of the CERTIFIED copies of the priority documents have been in received in Application No. (Series Code/Serial Number) The oath or declaration is objected to by the Examiner.	
 ☐ Acknowledgement is made of a claim for domestic priority und Attachment(s) ☒ Notice of References Cited, PTO-892 	
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). ☐ Interview Summary, PTO-413	
 Notice of Draftsperson's Patent Drawing Review, PTO-948 □ Notice of Informal Patent Application, PTO-152 	

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DETAILED ACTION

1. The Office acknowledges the receipt of Applicant's preliminary Amendments A, B and C, Paper Nos. 5, 6 and 8, filed May 1, 1998, February 17, 1999 and July 19, 1999. Claims 1-8 are pending and are examined in the instant application.

Specification

2. The specification is objected to because of the following:

The page numbering is not consecutive. The first page of the sequence listing should be 17, and so on. Furthermore, the first page of the claims is presently "17" and the second page is "27". The numbering of the first page of the claims should follow the last page of the sequence listing, consecutively followed by the second page of the claims.

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821-1.825. 37 CFR 1.821(d) states that where the description or claims of a patent application discuss a sequence that is set forth in the "Sequence Listing", reference must be made to the sequence by use of the sequence identifier, preceded by "SEQ ID NO:" in the text of the description or claims, even if the sequence is also embedded in the text of the description or claims of the patent application. Applicant

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should note in particular the nucleotide/amino acid sequences disclosed on pages 4-12, which must be identified by SEQ ID NO.

On page 1, "Tribus Triticeae" is not an art-recognized genus-species nomenclature. Furthermore, if such a species existed, it should be written as "Tribus triticeae".

The recitation of claim numbers in the disclosure (see page 2) should be avoided.

Page 15, line 10, the length of time for staining in ethidium bromide is not given.

Page 14, line 11, the use of "even" is awkward and should be deleted.

Appropriate correction is required. Applicant may not enter new matter into the specification.

35 U.S.C. 112, second paragraph

3. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. All the claims are replete with vague and indefinite language of such an extent as to render any meaningful determination of their scope and content virtually impossible.

Claims 1 and 6 contain recitations which are in parenthetical. It is unclear whether or not Applicant intends for these recitations to be limitations in the claims. It is suggested that the use of parenthetical be avoided, unless it is to show an abbreviation.

In claim 1, "characterized in that" is interpreted to mean "comprising".

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The species "Triticum aestivum" should be italicized. It is unclear what "Tribe Triticeae" is. Is it the same as the species Tribus triticeae (not an art-recognized species) disclosed on page 1 of the specification?

In claims 1 and 6, it is unclear whether or not "as well as" is a limitation in these claims.

In claim 1, "the Triticum aestivum species", "the Tribe Triticeae", "the polymerase chain reaction" lack antecedence.

In claim 1, it is unclear what is being claimed. The claim states "microsatellite markers". However, the claim further recites using PCR (what is using PCR?) and two specific (specific for what?) primers of 20 ± 3 bases. It is unclear whether the primers are used in PCR to locate the claimed microsatellite markers, or that the claimed microsatellite markers are the primers. In other words, it is unclear how the limitations of claim 1 apply to the claimed microsatellite markers, if at all.

In claim 4, if all the individual bases are mutated, it is then unclear what pattern would be established.

Claim 5 is an omnibus claim.

In claim 6, "the preparation" lacks antecedence. Also, it is unclear whether or not the microsatellite marker of claim 6 is the same as that of claim 1. "A method for preparing the microsatellite markers of claim 1" is suggested.

Since claim 6 is a method claim, Applicant should amend the claim such that the method steps are clearly defined.

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In claim 6, it is unclear whether or not "with the help of" is a claim limitation.

In claim 6, "detected to polymorphous fragments" is unclear. Are "polymorphous fragments" the same as "hypervariable genome sections"? Furthermore, how does a microsatellite sequence relate to a microsatellite locus? It would appear Applicant is using these four terms interchangeably without establishing any relationship among them.

In claim 8, it is unclear whether or not "depending on the separation system" is a claim limitation.

Clarification and/or correction are required.

35 U.S.C. 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Roder et al. (Mol. Gen. Genet., Vol. 246, No. 3, February 1995, p. 327-333 (U)). Even though the claims are replete with vague and indefinite language of such an extent as to render any meaningful determination of their scope and content, Applicant has published an article more than one year prior to Applicant's PCT filing date which appears to have anticipated Applicant's claimed invention.

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Roder teaches microsatellite markers of *Triticum aestivum* identified using PCR primers which average a length of 20 ± 3 bases (Abstract and Table 1). The products have the "repeat type" limitations stated in claims 2-5. The method of claim 6 is standard PCR procedure (Materials and Methods, p. 378). Separation of markers using non-denaturing (native) polyacrylamide gels, detection of PCR products using ethidium bromide staining, and DNA sequencing using an automated laser fluorescence sequence are also disclosed. Accordingly, the claimed invention is anticipated by Roder.

Conclusion

- 6. No claims are allowed.
- 7. Papers relating to this application may be submitted to Technology Sector 1 by facsimile transmission. Papers should be faxed to Crystal Mall 1, Art Unit 1648, using fax number (703) 308-4242. All Technology Sector 1 fax machines are available to receive transmissions 24 hrs/day, 7 days/wk. Please note that the faxing of such papers must conform with the Notice published in the Official Gazette, 1096 OG 30, (November 15, 1989).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Bui whose telephone number is (703) 305-1996. The Examiner can normally be reached Monday-Friday from 6:30 AM - 4:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Chris Eisenschenk, can be reached at (703) 308-0452.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0196.

Phuong Bui Patent Examiner Group Art Unit 1648 September 19, 1999 PHUONG T. BUI PATENT EXAMINER